

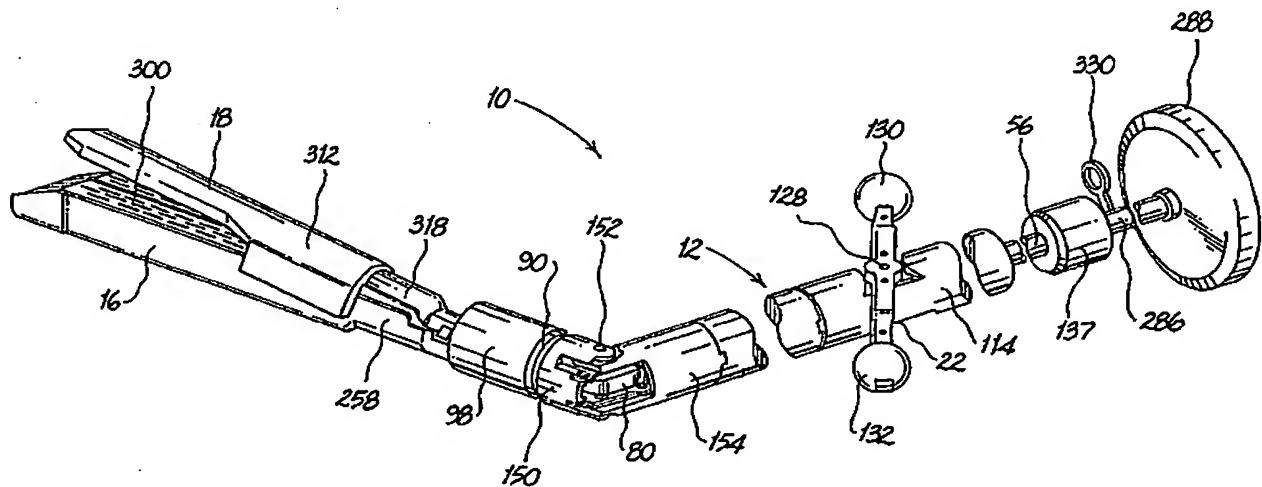
REMARKS

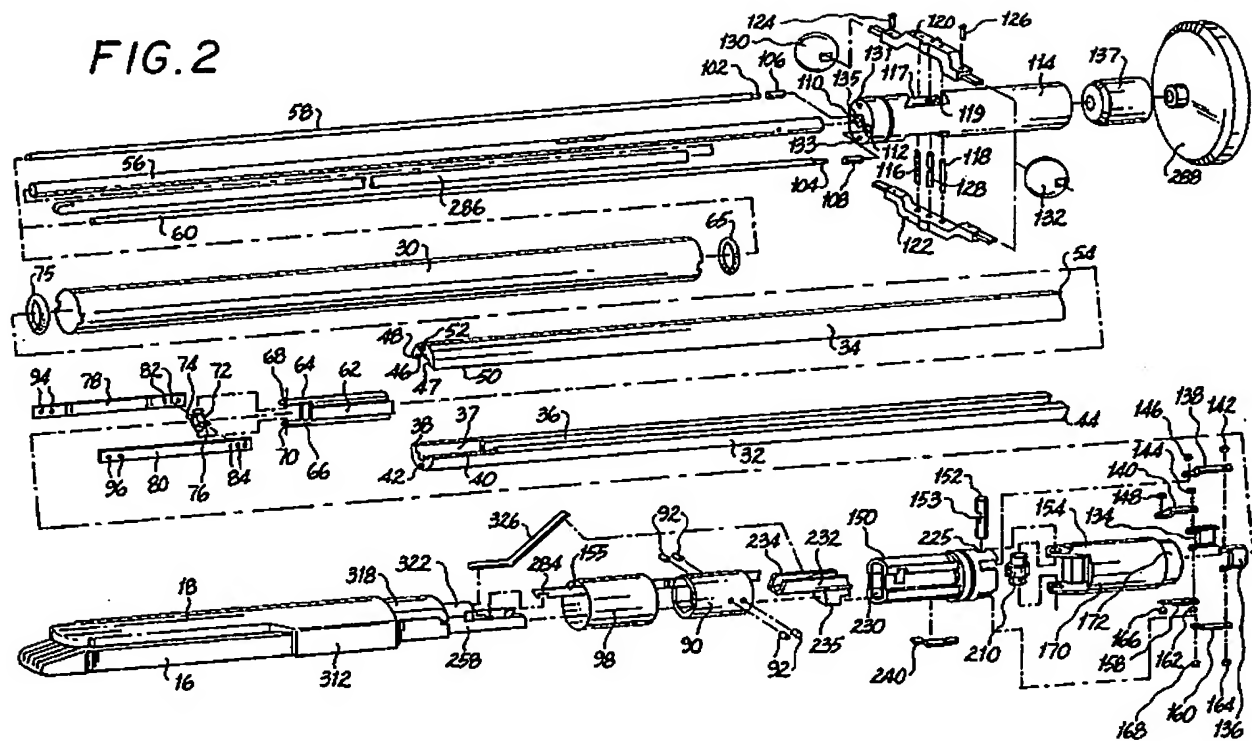
Claims 32-36 and 39-41 are currently pending in this application. In view of the remarks to follow, reconsideration and allowance of this application are respectfully requested.

In the Office Action, Claims 32-36 and 39-41 were rejected under 35 U.S.C. § 103(a) as being obvious over U.S. patent No. 5,485,952 ("Fontayne") in view of U.S. patent No. 5,865,361 ("Milliman") and in view of U.S. patent No. 5,897,562 ("Bolanos").

Fontayne discloses an apparatus 10 for applying surgical fasteners shown in FIG. 8 reproduced below which includes a cartridge housing 16, an anvil member 18 and a collar tube 90. Collar tube 90 is movable via a links 78 and 80 (FIG. 2) into a cam surface 318 formed on anvil member 18 to move the anvil member 18 into approximation with cartridge housing 16.

FIG. 8





Bolanos discloses a non-invasive apparatus shown in FIGS. 1, 3, 4 and 6A reproduced below which includes a staple cartridge 24 and an anvil 26. A roller assembly 34 includes a roller member 51. Roller assembly 34 is movable in a proximal direction via a wire or rod 36 to pivot anvil 26 towards staple cartridge 24. Staple ejectors 28 are linked to moveable trigger 20 by elongate firing cables 32 that are secured to staple ejectors 28 at one end, and are secured at the other end to pulleys 48. Additionally, proximal movement of the trigger 20 causes staple ejectors 28 to be moved proximally. (Column 5, lines 23-36.)

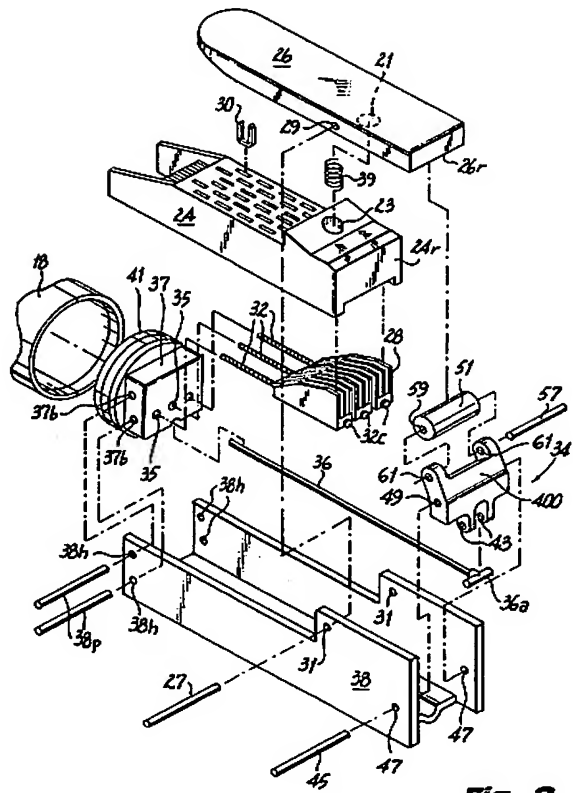


Fig. 3

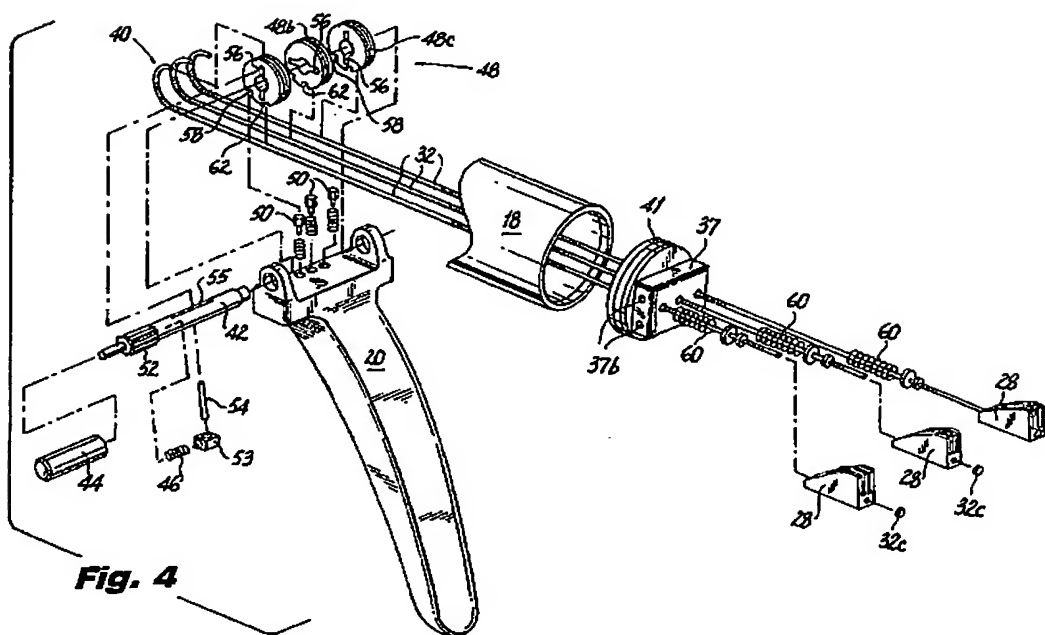
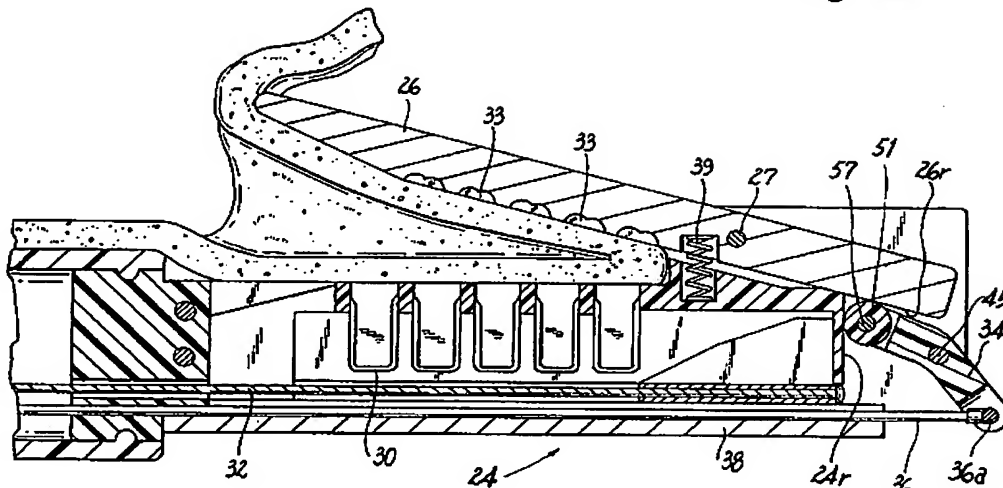
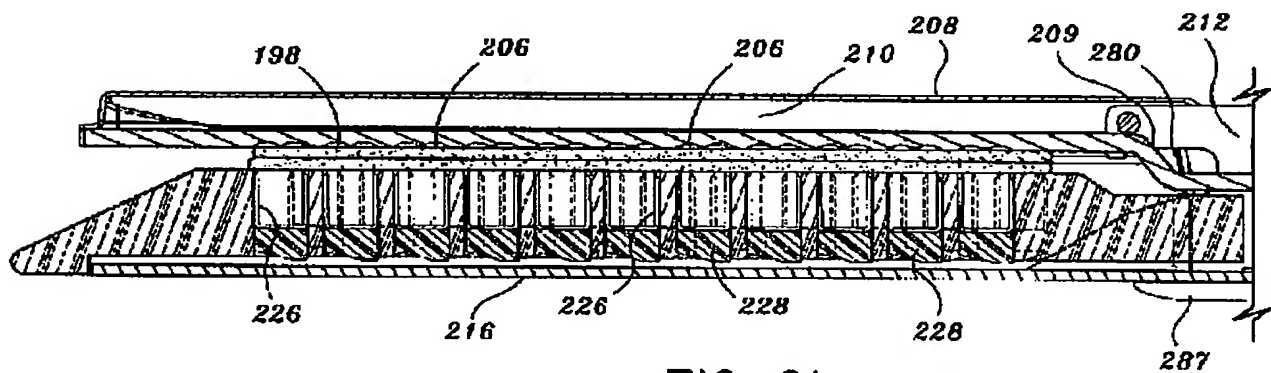
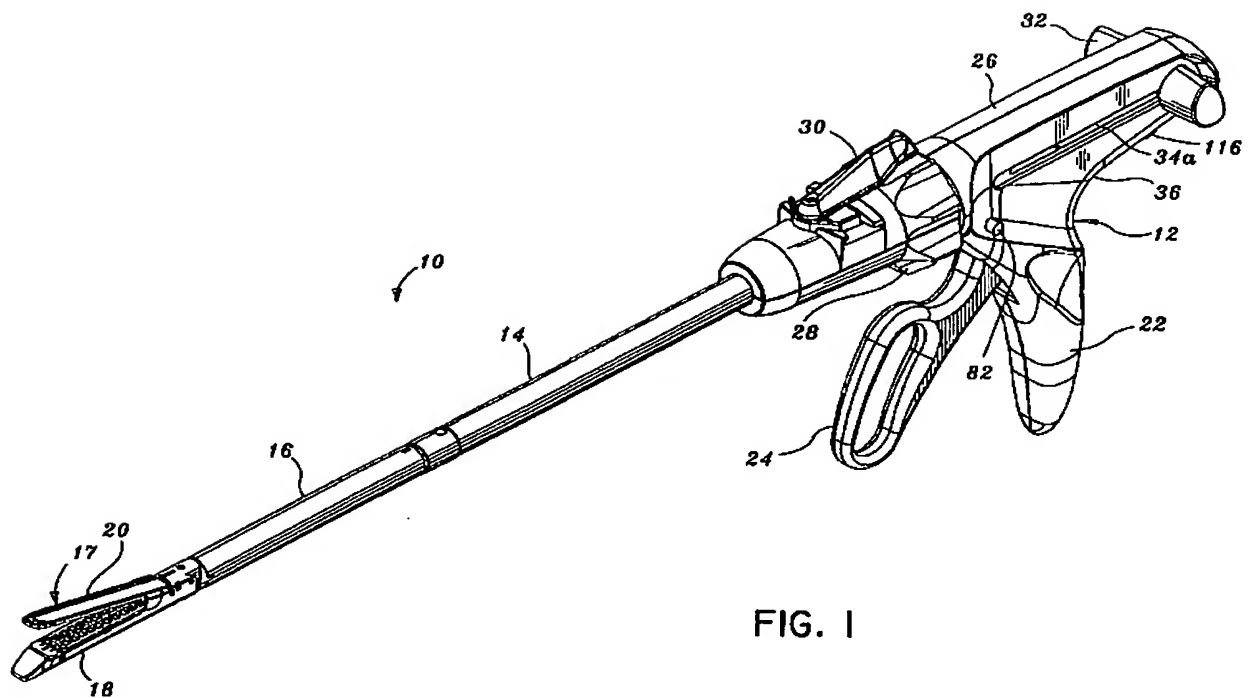


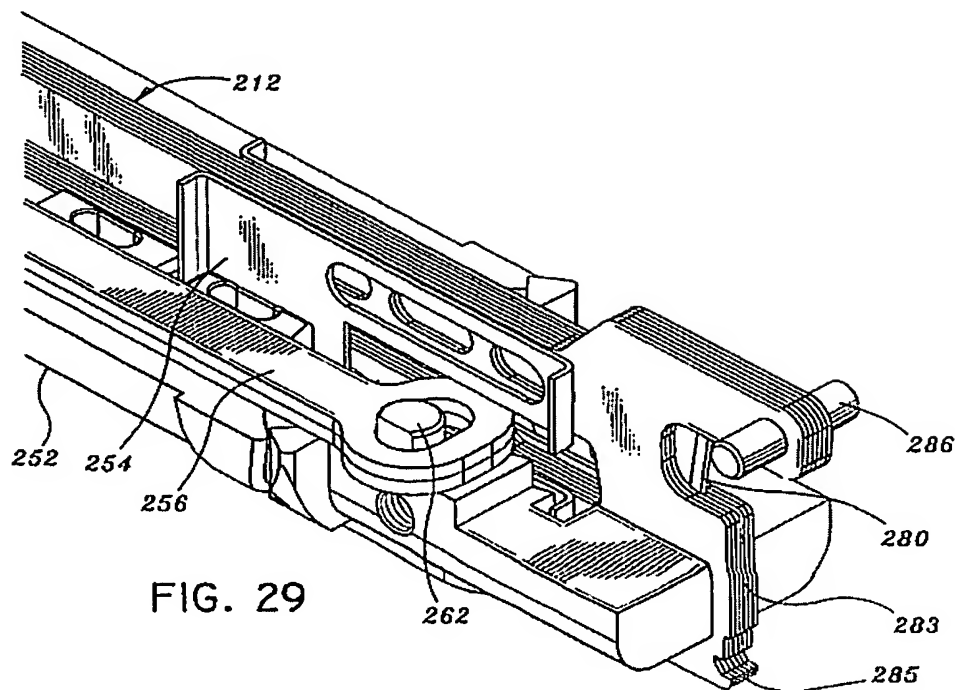
Fig. 4

Fig. 6A



Milliman discloses a surgical stapling apparatus shown in FIGS. 1, 24 and 29 reproduced below which includes a tool assembly including an anvil assembly 20 and a cartridge assembly 18. A camming surface 209 is formed on a proximal end of anvil portion 204 of anvil assembly 20. The assembly includes a drive assembly 212 having a working head 268 which has a cam roller 286 (FIG. 29) which is movable axially to pivot anvil assembly 20 in relation to cartridge assembly 18 from an open position to a closed position. Working head 268 also includes a support member 287 which moves along cartridge assembly 18. Cam roller 286 and support member 287 engage anvil assembly 20 and cartridge assembly 18, respectively, to define the maximum tissue gap adjacent the location where stapling formation occurs. Thus, drive assembly 212 functions to both move the anvil assembly 20 to a closed position and to define a maximum tissue gap.





Claim 32 recites a tool assembly including, inter alia, at least one pulley operatively associated with the dynamic clamping member to effect movement of the dynamic clamping member from the first proximal position to the second distal position. Applicants respectfully submit that neither Fontayne nor Milliman nor Bolanos disclose an apparatus which includes at least one pulley which effects movement of a dynamic clamping member from a first proximal position to a second distal position.

In the Office Action, the Examiner stated that “Fontayne fails to disclose wherein said flexible actuator link is a pulley mechanism operatively associated with the clamping member” and “Milliman also fails to disclose at least one pulley operatively associated to the dynamic clamping member to effect movement of it.” The Examiner relied on Bolanos to teach “the concept of a surgical tool assembly having a pulley mechanism 48 operatively associated with a

driver (see figs. 3-4) for the purposes of efficiently effecting movement of said driver.”

Applicants have noted, however, that the asserted pulley mechanism 48 of Bolanos moves the structure that is associated therewith (i.e., staple ejectors 28) proximally. Moreover, and in direct contrast to the limitations of Claim 32, the asserted pulley mechanism 48 of Bolanos does not move any structure from a first proximal position to a second distal position. For at least this reason, the rejection of Claim 32 under 35 U.S.C. §103(a) over Fontayne in view of Milliman and in view of Bolanos should be withdrawn.

Assuming arguendo that Bolanos teaches a pulley mechanism that moves a structure from a first proximal position to a second distal position, which it does not, Claim 32 is allowable under 35 U.S.C. §103(a) over Fontayne in view of Milliman and in view of Bolanos for at least the following additional reasons.

In the Office Action, it was asserted that “The substitution of Fontayne’s flexible actuator link 155 by a pulley mechanism such as shown by Bolanos would have been obvious ... since the substitution of one known and equivalent mechanism (a pulley mechanism as taught by Bolanos) for another (a flexible actuator link as taught by Fontayne) would have yielded predictable results.”

The proposed substitution of Bolanos’ pulley mechanism with Fontayne’s link would not only not yield predictable results, but substituting Fontayne’s link with a force-transferring pulley mechanism would render Fontayne unsatisfactory for its intended purpose. That is, if Fontayne’s link 155 were substituted with a pulley mechanism, the (direction-of-force-transferring) link 155 would urge the surgical knife 265 proximally (from its proximal position with respect to the cartridge), thus rendering this feature useless. Therefore, the proposed modification of Fontayne

to include the pulley mechanism of Bolanos violates MPEP 2143.01(V).

Additionally, in the Office Action, the Examiner stated the following:

“Although Fontayne’s clamping member 280 slidable [sic] engages the cartridge assembly, Fontayne fails to disclose a mechanical interface which slidably engages the anvil assembly. Milliman shows a tool assembly 17 including an anvil 20, a cartridge 18, and a dynamic clamping member with a first and a second mechanical interface as claimed (see Figs. 45, 49, 51-52) for the purpose of press [sic] together the anvil and cartridge assembly to uniformly maintain a gap between tissue contacting the anvil and the cartridge during the slidably forward movement of said clamping member within the tool assembly. It would have been obvious to one having ordinary skill in the art to have provided Fontayne’s dynamic clamping member 280 having a first and second mechanical interfaces as taught by Milliman to maintain engagement of said clamping member with both the anvil and cartridge during forward movement of said clamping member within the tool assembly providing a uniform tissue gap during the ejection of staples.”

Applicants respectfully submit that, one of ordinary skill would not have any objective reason to combine Milliman’s drive assembly 212 including working head 268 with Fontayne’s apparatus. The drive assembly 212 of Milliman is configured to move the anvil assembly 20 to a closed position as well as define a maximum tissue gap. The clamp collar 90 of Fontayne effects movement of the anvil in relation to the cartridge.

There would be no objective reason to modify Milliman to include the clamp collar 90 of Fontayne because the drive assembly 212 of Milliman provides the same feature (i.e., to move the anvil assembly in relation to the cartridge assembly). Additionally, there would be no objective reason to modify Fontayne to include the drive assembly 212 of Milliman because Milliman’s drive assembly 212 would result in redundancy of the clamp collar 90 (i.e., both

Milliman's drive assembly 212 and Fontayne's clamp collar 90 move the anvil assembly in relation to the cartridge assembly). Thus, the Examiner has not established a *prima facie* case of obviousness because the simple assertion that "the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references." (See MPEP 2143.01 (IV)). For these additional reasons, Applicants believe that Claim 32 is patentable under §103(a) over Fontayne in view of Milliman and in view of Bolanos and is in condition for allowance.

Claims 33-36 and 39-41 depend from Claim 32. For at least the reasons discussed above with respect to Claim 32, Applicants submit that Claims 33-36 and 39-41 are also in condition for allowance.

Appl. No. 10/529,799
Amdt. Dated January 22, 2009
Response to Office Action mailed on October 22, 2008

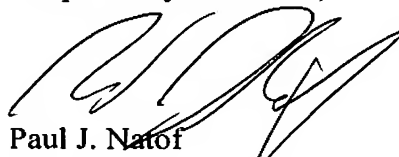
In view of the foregoing remarks, Applicants respectfully submit that all claims pending in this application, namely Claims 32-36 and 39-41, are in condition for allowance. Accordingly, early and favorable reconsideration of this application is respectfully requested. Should the Examiner feel that a telephone or personal interview may facilitate resolution of any remaining matters, she is respectfully requested to contact Applicants' attorney at the number indicated below.

Please charge any deficiency as well as any other fee(s) which may become due under 37 C.F.R. §1.16 and/or 1.17 at any time during the pendency of this application, or credit any overpayment of such fee(s) to Deposit Account No. 21-0550. Also, in the event any extensions of time for responding are required for the pending application(s), please treat this paper as a petition to extend the time as required and charge Deposit Account No. 21-0550 therefor.

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